

News Update

MAY 2019

A Water Secure World Free of Poverty and Hunger through Sustainable Rural Development



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From Secretary General's Desk...

Dear Colleagues,

Driving the next wave of innovation, Cloud-based technologies have been playing an ever-increasing role in how we manage our water resources not only at national or basin levels but also



at farm level. In the last few issues of the ICID News Update, I have alluded you to a new product, called Basin Futures (BF), which has been developed by CSIRO-Australia. Under a recently signed MoU, ICID and CSIRO plan to promote BF in data scarce countries from Africa and Asia. ICID, as a leading scientific and knowledge dissemination network, provided a platform for Beta testing of this model during a training workshop last month at our Central Office. Young researchers from several organizations, including ICID, participated in the testing session with actual data from 6 river basins from several countries. BF makes use of both global datasets and user-supplied parameters for a specific basin and I am pleased to share that the Beta testing was quite successful.

Along similar lines in April, ICID in association with the Korean National Committee (KCID) and the Chinese National Committee (CNCID) organized a five-day International Young Professionals Training Program on the theme "Climate Resilient Smart Irrigation Systems" for a group of 34 Young Professionals representing all the continents at the Rural Community International Education and Exchange Center (RC-IEEC) in the Republic of South Korea. There were several technology demonstration sessions during the training, including IrriSAT, a mobile phone App for precision irrigation at the farm level. We may recall that IrriSAT was adjudged as the ICID WatSave (Technology) Award winner during the 69th IEC Meeting held at Saskatoon, Canada in August 2018.

The training program was followed by an International Workshop with participation from around 200 participants, who deliberated on various technological solutions to a variety of water-related problems challenging our sector.

The ICID Young Professionals' e-Forum is abuzz with a lot of activities as they are busy exchanging their research learning and professional opinions on a number of contemporary topics ranging from floods to drainage and relevant issues in between. The final on-going e-Discussion for this year is on "Cost-effectiveness of Agricultural Field Drainage" from 15-31 May 2019. I urge all the Young Professionals from various countries to join the discussion by becoming an active member of the forum.

ICID is receiving excellent nominations for both WatSave Awards and Recognition for World Heritage Irrigation Structures. So, please nominate water-related innovations and heritage structures from your country and send in your entries before the deadline.

Colleagues, the ICID Management Board meeting held in Rabat, Morocco, last month, reviewed the preparations for the upcoming Third World Irrigation Forum (WIF3) and 70th IEC meeting in Bali, Indonesia to be held in the month of September and also took into consideration a host of other administrative issues.

On behalf of ICID President and Vice Presidents, I extend a warm and welcoming invitation to all the prospective delegates and stakeholders and look forward to meeting you all in the paradise island, Bali.

Best Wishes,

Ashwin B. Pandya
Secretary General

Highlights of the Issue

- First Management Board Meeting (1/2019) held in Rabat, Morocco | 12 April 2019
- ICID, CSIRO organize Basin Futures training workshop in New Delhi, India | 8-12 April 2019
- Earth Day Network observes International Earth Day - Protect our Species | 22 April 2019
- Meeting with the First Secretary, Deputy Ambassador at Embassy of Uzbekistan, New Delhi, India | 12 April 2019
- First International Young Professionals Training Program (YP-TP) held in Korea | 22-26 April 2019
- IYPeF Fourth e-Discussion held on "Flood management in agriculture" | 15-30 April 2019
- Don't miss the event > Landscape Irrigation Conference and Exhibition, Queensland Australia | 18-20 June 2019
- 2019 Nominations Are Now Open > ICID WatSave Awards & Recognition of World Heritage Irrigation Structures (WHIS) | Send your entries latest by **30 June 2019**

First Management Board meeting held in Rabat, Morocco

The first (01/19) meeting of the Management Board (MB) chaired by President Felix B. Reinders was held on 12 April 2019 and attended by VPH Dr. Ding Kunlun, VPH Laurie C. Tollefson (joined virtually), VP Dr. Brian T. Wahlin and Secretary General Ashwin B. Pandya as Member Secretary. The meeting mainly discussed the upcoming ICID activities and events as a follow up to the Third World Irrigation Forum (WIF3) & 70th IEC Meeting to be held in Bali, Indonesia from 1-7 September 2019. At the outset, President Reinders welcomed the members and expressed his gratefulness to the Moroccan National Committee of ICID (ANAFIDE) and esteemed colleagues for hosting the first MB-1/19 meeting in Rabat, Morocco and for making necessary arrangements for the same. He also welcomed Vice Presidents Mr. Ahmed EL BOUARI and Dr. Marco Arcieri as special invitees.

The meeting apprised the members on the matters pertaining to Constitution of

a Task Force on Legislative Framework on Agricultural Drought Mitigation for European Region; Setting up of Working Group on Adaptive Flood Management (WG-AFM); Setting up of ITAC for 24th ICID Congress in Sydney, Australia (22-28 September 2020); Review of status of ongoing ICID activities/ event; Preparations for the 70th ICID Celebrations; Launch of Independent Service Unit (ISU) during the 70th IEC Meeting in Bali, Indonesia and proposed Construction of a new block at ICID Secretariat in New Delhi, India.

The meeting further discussed matters pertaining to Memorandum of Understanding (MoU) with various international organizations including World Meteorological Organization (WMO). The MB noted the development with regard to the management of World Water System Heritage (WSH) Program, a joint collaboration between ICID and World Water Council as envisaged during its conception. The MB decided that ICID may undertake WSH program as a separate one under ICID banner, independent of currently ongoing scheme

similar to Recognition of World Heritage Irrigation Structures (WHIS).

In addition, the MB considered ANAFIDE's request to change the venue of the 5th African Regional Conference (16-18 March 2020) from Rabat to Marrakech, as the latter is an attractive tourist place in terms of accommodation and flight services. The meeting later discussed the "Expression of Interest for 72nd IEC Meeting in 2021" and to take necessary steps to receive an invitation to hold the IEC meeting. The MB meeting ended with a vote of thanks to the Chair.



ICID, CSIRO organize training workshop on Basin Futures

ICID and the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia have signed a Memorandum of Understanding (MoU) for furthering scientific cooperation to encourage joint research and development activities in the development of Basin Futures (BF) -- a web-based capacity development and planning tool (developed by CSIRO with broad technical input from ICID) – among different stakeholders. As part of the MoU, ICID and CSIRO jointly organized a Beta Testing workshop on BF at ICID Central Office in New Delhi, India from 8-12 April 2019.

Basin Futures released its Beta testing version in 2018 and as part of the above MoU, the Basin Futures project team conducted the above training session to discuss the benefits of BF and to further explore how potential partners or organizations could benefit from the existing partnership between ICID and CSIRO.

The five-day training workshop was attended by around 30 national and international participants from the National Institute of Hydrology, Central Water Commission, CII Triveni Water Institute, Council on Energy Environment and Energy, the World Bank, Asian Development Bank, Stockholm Environment Institute and the Gujarat State Government, India.

Secretary General A.B Pandya, Executive Director Harish Varma, Dr. Sahdev Singh (Dir-KM) and Ms. Prachi Sharma, Knowledge Officer from ICID Central Office participated in the workshop. The CSIRO team was represented by Mr. Amit Parashar, Dr Carmel Pollino, Mr. Peter Taylor and Dr Ashmita Sengupta.

The first day of the workshop (8 April 2019) provided an overview of BF and



familiarized the participants with the built-in tools, provided sufficient background knowledge of the modelling and aided in the interpretation of the outputs with hands-on training of BF with a case study on the selected basin. Participants, based on their background, shared the name of the Basin to work on and explored potentially the type of issues faced in the basin. A total of six river basins from India, Cambodia and Somalia were tested and assessed through the cloud-based model.

Mr. Parashar, Principal Research Consultant, CSIRO Land and Water (Australia) commenced the workshop introducing his team followed by a backgrounder on the BF model, which is aimed at supporting developing and emerging economies. Mr. Taylor projected BF as a basin-pedia (Encyclopedia of basins) which can be used to search basins all over the world with different parameters and generate data for rainfall, potential evapotranspiration, climate and environment. BF aims to answer three questions: (i) How much water do we have? (ii) What are we doing with it and what is the value from that water? (iii) Is there an opportunity for the future development of water resources?

What is Basin Futures?

Basin Futures is a web application that is an entry-level modelling tool that aims to support rapid and exploratory basin planning globally. As a cloud-based tool, it brings together high-performance computing and large-scale global data sets to make data analysis accessible and efficient. The system is designed to bring together global and local datasets to empower decision-makers to understand their opportunities and constraints in managing their water resources. Basin Futures offers the users results in an efficient and timely manner.

Key Features

- User-friendly system.
- Preloaded global data and defaults.
- Ability to integrate global and local data.
- Integrated hydrological and agricultural models.
- Links to population and industrial demands and environmental flows.
- Visualization and reporting tools.
- Scenario development and exploration.
- Global climate scenarios.
- A rapid turnaround for initial water resource snapshots.
- Decision-focused outputs

The key goal of BF is to enable a cohort of users requiring initial stage understanding of water resources to support planning outcomes in a sustainable and climate resilient manner. BF (a multi-lingual platform) is not aimed at modelling regulated systems nor supporting water trading or water sharing and has user-friendly features as a cloud-based tool (requiring minimum computing resources from the client side).

The workshop agenda aimed to discuss (i) Focus of Basin Futures (ii) Supporting evidence-informed decision making (iii) Making water scenario modelling accessible (iv) Capacity development

(v) Improving user experience and; (vi) Opportunities to partner and mainstream the Basin Futures.

The training workshop strengthened the capacity of the participants to conduct efficient and repeatable water assessments and explore scenarios of change in their basin of interests. At the end of the training, participants were trained to set up their own models in Basin Futures to determine a baseline water balance and explore scenarios of change and development.

SG Pandya stated that the training workshop would provide an opportunity

to enable various stakeholders to join the Basin Futures platform as partners and/or funders and to continue the momentum for large scale adoption. He thanked everyone for their time, including CSIRO team for their support to organize the workshop and to promote BF tool as an innovative scenario-based water modelling platform, making water planning more accessible to the global audience.

***Those interested can write to icid@icid.org for more information about access to Basin Futures Beta Version.**



The Earth is what we all have in common

The 49th edition of **International Earth Day** — a global event with over a billion people from 192 countries participating to urge global action towards saving the planet – was observed on 22 April 2019. According to Earth Day Network, Earth Day 2019 is dedicated to protecting species and raising awareness about the accelerating rate of extinction. Climate change, deforestation, habitat loss, trafficking and poaching, unsustainable agriculture, pollution and pesticide are critically devastating factors that have led to the loss of species.

A recent report stated that humans are speeding extinction and altering the natural world at an 'unprecedented' pace, posing a dire threat to ecosystems that people all over the world depend on for their survival, a sweeping new United Nations assessment has concluded. The 1,500-page report, compiled by hundreds of international experts and based on thousands of scientific studies, is the most exhaustive look yet at the decline in biodiversity across the globe and the dangers that create for human civilization. A summary of its findings, which was approved by representatives from the United States and 131 other countries, was recently released in Paris. The full report is set to be published this year.

“ Earth is facing a “mass extinction” of all species of mammals, birds, reptiles, amphibians, arthropods, fish, crustaceans, corals and other cnidarians, and plants, with between one and five species going extinct every year. Unfortunately, human beings have irrevocably upset the balance of nature and, as a result, the world is facing the greatest rate of extinction since we lost the dinosaurs more than 60 million years ago

– Earth Day Network ”

Read more <<https://www.nytimes.com/2019/05/06/climate/biodiversity-extinction-united-nations.html>>

First celebrated in 1970, Earth Day is dedicated to protecting millions of plant and animal species from going extinct and to show support for protecting the environment. On the occasion several events and campaigns are held worldwide to demonstrate support for environmental protection. Typical activities include planting trees, cleaning surroundings, conducting various programs for recycling and conservation, and using recyclable containers aiming collectively to stop global warming and avoiding environmental destruction.

ICID alongside its international partners, countries, foundations and individuals reinforce the need to fix the damage collectively caused. Realizing the importance of the day, ICID as a scientific and knowledge dissemination network of 78 member countries is promoting innovative approaches, tools and resources to tackle irrigation development challenges such as water scarcity, competition over shared natural resources and the impact of climate change on future water resources.

Celebrating Earth Day 2019, Google Doodle took people across the planet to take a look at some awe-inspiring organisms which inhabit it. The interactive slideshow <<https://indianexpress.com/article/trending/earth-day-2019-google-doodles-interactive-slideshow-features-six-awe-inspiring-organisms-5687541/>> explores a total of six such organisms along with their “earthly superlative” — its unique quality.

What Next?

The rapid rate of extinction can still be slowed, and many declining, threatened and endangered species can be recovered, according to the Earth Day Network. **The United Nations' list of**



Did you know?

- Insect populations have decreased by more than 75% in Germany over the last 28 years, which is "alarming" because 80% of wild plants rely on bees and other insects for pollination, and 60% of bird species rely on insects for food.
- Primates are also under "extraordinary threat," with close to 60% of the world's 504 primate species under threat of extinction and 80% in "severe population decline."
- In the past 20 years, by-catch from global fishing operations has affected 75% of all toothed whale species, such as dolphins and porpoises, 65% of baleen whale species, such as humpback and blue whales and 65% of pinniped species, such as sea lions.
- In addition, 40% of the world's bird population is in decline, with 1 in 8 species threatened with global extinction.
- Big cats, such as leopards, tigers and cheetahs, are in "critical decline," and many will become extinct in the next 10 years. They are often exploited for their body parts and skins, and China retains the biggest market for these items.
- Lizard populations are "especially vulnerable" to climate change, according to the organization. If the current decline continues, 40% of lizards will become extinct by 2080.
- The American Bison, which once roamed from Alaska to New Mexico in the millions, now occupy less than 1% of their original habitat. The species is now compared to herded cattle due to its "small and tightly controlled" habitat.

'What you can do' gives an insight into what can be done for protecting millions of plant and animal species from going extinct.

How to "Be the change you want to see"

- Educate people about the accelerating rate of extinction of millions as well as raise awareness on what is causing it.
- Create change via policies that protect broad groups of species as well as individual species and their habitats.
- Build a global movement that embraces nature.



- Encourage the alteration of individual habits, such as developing plant-based diets and eliminating the use of pesticides and herbicides.

It's high time we understand that all living species have intrinsic value and play a specific role in the circle of life. The dwindling number of species will not just make the world a less colourful or wondrous place. It also poses risks to people.

Watch Video – Significance of International Earth Day <<https://abcnews.go.com/International/earth-day-2019/story?id=62552199>>

First International Young Professionals Training Program held in Korea



ICID in association with the Korean National Committee (KCID) and the Chinese National Committee (CNCID), organized a five-day International Young Professionals Training Programme (YP-TP) to hone the skills of the budding young professionals on the theme "Climate Resilient Smart Irrigation Systems" from 22-26 April 2019 at the Rural Community International Education and Exchange Center (RC-IEEC) in Republic of South Korea.

The first of its kind, international YP training program - attended by 34 participants from 17 countries namely, Afghanistan, China, Egypt, India, Iran, Italy, Korea (Republic of), Myanmar, Nigeria, Russia, South Africa, Sri Lanka, Sudan, Tajikistan, Ukraine, USA and Zambia -- mainly focused on building resilient irrigation systems around the

world in the face of climate change, how these systems may be implemented in different biophysical environments and the advanced technologies that are currently in practice.

The inaugural session held on 22 April 2019 began with a welcome address by Mr. Kim In Sik, Chairman, Korean National Committee on Irrigation and Drainage (KCID) and CEO, Korea Rural Community Corporation (KRC) who gave a brief introduction about ICID and its endeavour to promote capacity development program to attract young minds to agricultural water management sector by organizing training programs for YPs internationally. President Felix Reinders, in his keynote address, expressed his jubilation to welcome participants from different countries, especially young professionals as they

are the future leaders in irrigation and drainage. Secretary General A.B Pandya gave an overview of the young professionals training program and an introductory presentation on the knowledge management portal (closing ceremony). Er. Harish Varma, Executive Director gave a brief presentation on ICID activities and various initiatives undertaken for capacity development of young professionals.

As part of the training, KCID conducted a survey with five questions to find the goals, vision and challenges in the agricultural sector from Young Professionals from around the world. The questions were discussed in detail during an interactive session steered by Dr. Marco Arcieri (Vice President, ICID and Secretary General ITAL-ICID) on 24 April 2019. Besides, all the YPs provided

a detailed write-up of their country profile on the current status of technology usage in the irrigation sector, prior to the training program. The training programme also included a one-day technical tour (25 April 2019) to nearby dams and irrigation systems to understand practical aspects of operational performance of irrigation systems in addition to classroom lectures and demonstrations. This included a visit to Dae-ah Dam (first modernized and multi-purpose dam in Korea), Saemangeum Seawall (longest man-made dyke in the world) and Saemangeum 33 Center. In addition, participatory exercises of one-hour duration were also organized.

The training program was followed by an international expert consultation

workshop on “Irrigation Technologies to Mitigate Climate Change” (26 April 2019) that provided an opportunity to the young professionals (YPs) to have a broader and in-depth exposure to emerging irrigation technologies and management scenarios considering the urgent need for a sustainable climate change-resilient agriculture sector.

Experts shared with them experiences from different regions of the world and discussed ways to overcome the negative impacts of climate change, particularly in the agriculture sector with a focus on water management. Case studies from various countries including South Africa, Australia, China and India on climate change, water resources management and modernized irrigation systems

were shared with the participants. In their feedback, participants from various countries appreciated the exposure they received during the training as it made them adept with the latest practices and gave them an insight to further improve their skills.

ICID, as a part of its capacity development program and to attract budding young minds to agricultural water management (AWM) sector, has been organizing training programmes for YPs regionally and internationally. The previous Asian Regional YP training program was organized in Beijing, China in April 2018 and Kathmandu, Nepal in May 2018.



Meeting with the First Secretary, Deputy Ambassador of Uzbekistan

On invitation from the Embassy of Uzbekistan, Er. Harish K. Varma, Executive Director and Mr. B.A Chivate, Director (Technical) made a courtesy visit to Mr. Azamjon Mansurov, First Secretary, Deputy Ambassador of Uzbekistan on 12 April 2019. A meeting was held to discuss and foster a more collaborative working environment between Uzbekistan and ICID through the Uzbekistan National Committee of ICID (UzNCID), which is an active member of ICID since 1994. Executive Director Varma apprised Mr. Mansurov about the ongoing ICID activities, ICID Vision 2030, role of various technical Working Groups to promote the mandate of ICID, besides various initiatives and programmes undertaken by ICID. ED Varma expressed his pleasure that ICID would be glad to support activities

under Technical Support Programme (TSP) and capacity development of Young Professionals from Uzbekistan. Mr. Mansurov was further informed that Dr. Shukhrat Mukhamedjanov from Uzbekistan is actively contributing in the ICID Working Group on Irrigation and Drainage in the states under socio-economic transformation (WG-IDSST) as Secretary. Dr. Mukhamedjanov also participated in the 23rd ICID Congress and 68th IEC meeting held in Mexico City, Mexico (8-14 October 2017) and presented a brief on development of irrigation and drainage in Uzbekistan.

It was informed that Mr. Kamol Shukhratovich Khamraev from Amu-Bukhara Basin Department of Irrigation Systems under the Ministry of Agriculture and Water Resources of the Republic of

Uzbekistan was nominated by UzNCID and participated in the Young Professional training programme held in Beijing, China in April 2018 as a participant fully sponsored by ICID. Pursuant to the meeting, a copy of ICID annual report (2017-18), ICID Brochure, ICID Vision 2030 were shared with Mr. Mansurov providing coverage of various ICID activities.

ED Varma and Director (Technical) Chivate expressed their privileged pleasure and honour to be invited and received by the First Secretary for the meeting and both the parties unanimously agreed to further identify areas of collaboration between Uzbekistan and ICID in addition to the existing ones.



Global Launch of UN Decade of Family Farming (2019-2028)

The Global Launch of the United Nations Decade of Family Farming (2019-2028) co-organized by Food and Agriculture Organization of the United Nations (FAO) and the International Fund for Agricultural Development (IFAD) as the Joint Secretariat of the UN Decade will take place at FAO headquarters in Rome, Italy on 29 May 2019. The event aims to strengthen commitments of a wide range of stakeholders to reformulate policies and institutional arrangements for the benefit of family farming.

The Launch will be preceded on 27 and 28 May 2019 by farmers' knowledge exchange sessions and regional dialogues on priorities for the

implementation of the Decade, open to the participation of representatives of the relevant stakeholders (Governments, Civil Society Organizations, food producer organizations, Academia, and the Private Sector).

The main objectives of the event are:

- Present the Decade's objectives and the Global Action Plan;
- Seek for engagement of various stakeholders through concrete actions at country level to support smallholder family farming through enabling policies and investments;
- Increase understanding about the potentials and multi-dimensional

contributions of family farming and how it can contribute to the achievement of SDGs.

Building on the success of the International Year of Family Farming of 2014, the Decade provides a unique opportunity, in the framework of the SDGs, to tackle the cross-cutting and multi-dimensional issues facing the family farmers and position them as key agents of change in transforming food systems.

Family farming produces over 80 percent of world's food, while it also improves environmental sustainability of agriculture, preserves and restores biodiversity and ecosystems, traditional and nutritious food, thus contributes to

a balanced diet and to the maintenance of cultural heritage in rural areas. Family and farm represent a unity that continuously co-evolves, fulfilling economic, environmental, social and cultural functions of the wider rural economy and within territorial networks in which they are embedded.

The UN Resolution calls upon FAO and IFAD to lead the implementation of the Decade in collaboration with other relevant organizations of the United Nations system and invites governments and other relevant stakeholders, including international and regional organizations, civil society, the private sector and academia, to actively support the implementation of the Decade.

+ Download the Program agenda <http://www.fao.org/3/ca3760en/ca3760en.pdf>

For more details, please visit: <http://www.fao.org/partnerships/civil-society/events/details-events/en/c/1187174/>



IYPeF Fourth e-Discussion: Flood management in Agriculture

Recurrent flooding has become a common phenomenon leading to both death and economic losses where it occurs. While floods are often framed as harmful and destructive, they also have many positive impacts and provide benefits for people and nature. Flood Management in agriculture is very crucial which could be a long-term sustainable flood management in the flood prone areas through development and implementation of modern irrigation infrastructure where the water is allowed to move freely without causing any harm to the environment.

To share their views with regard to using floods for saving water and increasing food security, the fourth IYPeF e-Discussion on 'Flood management in agriculture' was held from 15-30 April 2019. The online discussion with active participation from young professionals explored the available opportunities concerning agricultural flood management through improving irrigation infrastructure including rehabilitation of barrages along the rivers and re-modernization of reservoirs and building the resilience of the community as a holistic approach.

Ms. Sahar Norouzi (Iran) acted as lead IYPeF coordinator, while Dr. Kamran Emami, ICID Vice-President and Manager Group of CAFM, steered the e-Discussion as mentor. The discussion aimed to achieve the following objectives: (i) Get an insight in converting flood threat into opportunities; (ii) Sharing traditional methods of saving flood as surface and underground water resources for agricultural purpose in different countries; (iii) Discuss the necessity of using floods for agricultural purpose in arid and semi-arid areas; (iv) Highlighting the views of young professionals with regard to using flood for saving water and increasing food security and; (v) Taking benefit of up-to-date knowledge and technology in flood management such as river restoration.

All YPs actively participated in the e-Discussion and shared their experiences, case studies and initiatives to reduce the risk of floods that can be turned beneficial through integrated and cost-effective approach by giving consideration to both modern and traditional methods of flood management.

As a way forward, Young Professionals were encouraged to share research and

experiences about flood management in agriculture and to play an active role in sharing the knowledge that can be leveraged to increase public awareness and applying technical knowledge of flood management in agriculture to increase the productivity of flood as an opportunity for saving surface or groundwater in arid areas, as well as reducing threats to the agricultural sector. The detailed e-Discussion can be accessed at <https://www.linkedin.com/feed/update/urn:li:activity:6523454611427295232/>.

The fifth and final e-Discussion on "Cost effectiveness of Agricultural Field Drainage" will be held from 15-31 May 2019 with Mrs. Adey Mersha (Ethiopia) as lead IYPeF coordinator and Mrs. Kathleen Murray (Australia) as Hon. Coordinator. All YPs are encouraged to actively participate and contribute to the e-Discussion.

For more details, please visit <https://www.linkedin.com/groups/6990321/>



Workshop on Latest Trends in Inspection & Investigations of Dams

Aqua Foundation Academy under the aegis of Central Water Commission and in association with ICID, Central Board for Irrigation and Power (CBIP) and the World Bank is organizing a training workshop on Latest Trends in Inspection & Investigations of Dams on 30-31 May 2019 in New Delhi, India. The primary aim of the workshop is to provide dam owners, dam engineers, and other professionals with information to help guide the planning and execution of dam inspection and investigation programs.

The two-day workshop will cover overview of dam inspection, dam safety inspection program, preparing for an inspection,



inspecting embankment dams, concrete and masonry dams including spillways, outlets and mechanical equipment and general areas.

Use of remotely operated underwater vehicles (ROVs) for upstream underwater inspection of dam body and the reservoir

floor and the unmanned aerial vehicles (UAVs), also called DRONES, for surface mapping of the downstream face of the dam and the catchment area are increasingly being used in developed countries. Information regarding these advanced techniques will also be presented during the workshop. Additionally, Geophysical investigations are being increasingly used to ascertain internal conditions of dam in non-destructive manner, and same will be extensively covered in the workshop.

Dam safety inspection case study will be presented to illustrate the advantages of conducting field inspections in a timely

manner for sustaining the health of the dam. Besides, there will be various opportunities for dam safety industry to speak at the workshop and/or display their products.

During the Dam Safety Workshop 2019, the "Aqua Foundation's Dam Safety Awards" will be presented to individuals and organizations who have made a

remarkable mark in the field of dam safety. The awards are presented by Aqua Foundation to its members, stakeholders and contributors in recognition of their outstanding achievements in the field of Dam Safety.

Dam Safety Excellence Award 2018 for Life Time Achievement was conferred to Secretary General Ashwin B. Pandya.

Detailed catalogue of the workshop is available @ <https://bit.ly/308wEnq>

For complete details of workshop, please visit: <https://damsafety.co/> or E-mail: praggya@aquafoundation.in



Landscape Irrigation Conference and Exhibition

Irrigation Australia extends a warm welcome to its members and delegates from allied industry associations, who have keen interest in the efficient use of water in urban irrigation to be a part



of Landscape Irrigation Conference & Exhibition from 18-20 June 2019 at the Gold Coast Convention and Exhibition Centre in Queensland, Australia. The unique event with specific focus on

landscape irrigation will bring together the entire urban irrigation sector to provide a peer learning experience and offer delegates with the opportunity to see the latest water efficient products on display and hear from leading industry experts on their best practice techniques.

Irrigation Australia will be introducing case study presentations by leading experts on issues that often confront the industry, detailing how these matters were successfully resolved and improved efficient water use.

Visit the Case Study page on the Landscape Irrigation Conference website <<https://www.landscapeirrigation.com.au/>> to see the great range of case studies already submitted. If you have a case study that would be of interest to the landscape sector, then you can submit these online <<https://www.landscapeirrigation.com.au/>>

[call_for_case_studies/guidelines/](#)> or E-mail: info@irrigation.org.au.

Don't miss out > Featured Case Studies | Workshops | Field Trips

Guest Speaker | Costa Georgiadis

Who should attend? Councils | Nurseries | Landscapers | Irrigation Professionals | Golf Clubs | Groundsmen | Rain harvesting | Turf Managers

To register > <https://ecw.eventsair.com/landscape-irrigation-conference-and-exhibition-2019/eoi/Site/Register>

Download Registration Booklet > <https://www.landscapeirrigation.com.au/wp-content/uploads/2019/03/LC-Registration-Brochure.pdf> >

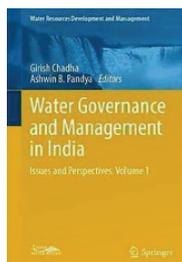
For more details, please visit: <https://www.landscapeirrigation.com.au/>



Latest Publications

Water Governance and Management in India: Issues and Perspectives, Volume 1

India has been facing severe water stress in recent years. The water management in the country needs a serious scientific understanding coupled with the cooperative approach rather than a competitive one. This book provides an insight into the current water regulations and highlights the need for effective water management and governance in India. It looks at current water regulations and underlines the need for overhaul of some laws to ensure that high water usage efficiency is attained, groundwater depletion is arrested and management of available resources is carried out in a disciplined manner. The publication also discusses the role of stakeholder engagement and water pricing as means



to manage increasing water demand across all sectors owing to rapid population growth and industrialization.

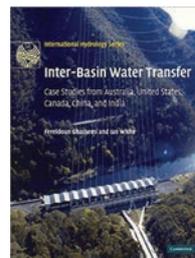
An effective guide for researchers, policy makers and stakeholders for the knowledge and ideas contained, it provides well-researched insights into the underlying scientific principles and considerations towards attaining an equitable water resources regime

Editors: Girish Chadha, Ashwin B. Pandya

For more details, visit: <https://www.springer.com/us/book/9789811363993>

Inter-Basin Water Transfer: Case Studies from Australia, United States, Canada, China and India

Increasing demands for irrigation, domestic and industrial water have generated a massive growth world-wide in the number of large water infrastructure projects involving the



transfer of water from basins considered to have surplus water to those where the demand for water has exceeded or is expected to exceed supplies. Using the experiences of projects in Australia, United States, Canada, China and India, this book examines case studies within the diverse geographical, climatic, economic, and policy regimes operating in these countries. It examines the water resources of Australia, the driest inhabited continent, and explores inter-basin water transfer projects in the United States, Canada, China and India, examining their benefits and impacts within these nations' contrasting economies and governance systems.

This comprehensive and well-illustrated text will be of great interest to professionals and researchers in the fields of hydrology, water resources, and to those engaged in environmental science, policy and regulation.

Authors: Fereidoun Ghassemi, Ian White

For more details, visit: <https://bit.ly/2JtThgj>



2019 ICID Awards Nominations Are Now Open!

ICID invites “Nominations for 2019 WatSave Awards and Recognition of World Heritage Irrigation Structures (WHIS)” for the Third World Irrigation Forum (WIF3) and the 70th International Executive Council (IEC) Meeting in Bali, Indonesia from 1-7 September 2019.

WatSave Awards 2019

ICID instituted the ‘WatSave Awards’ in 1997, presented every year, to recognize outstanding contributions to water conservation or water saving in agriculture across the world. Accordingly, the award given to individuals or a team of individuals are made in respect of actual realized savings and not for promising research results, plans and/or good ideas/intentions to save water. The awards are given in four categories: (i) Technology (ii) Innovative Water Management (iii) Young Professionals; and (iv) Farmer.

Nominations are invited from individuals/team through National Committees/

Committee. The entries are open to all professionals/ teams from ICID member countries as well as non-member countries. In case of an entry from a ‘non-member’ country, the nomination has to be routed through and validated by an active National Committee of ICID, who should be in touch with the nominee and must be aware of his/her work.

World Heritage Irrigation Structures (WHIS) 2019

A Task Team is set up every year to select historical drainage/drainage structures as received from various National Committees (NCs) to give them recognition on the lines of World Heritage Sites (as recognized by UNESCO). Nominations are invited from ICID National Committees for selection of “World Heritage Irrigation Structures” (WHIS) that includes both old operational irrigation structures as well as those having an archival value.

A National Committee can nominate more than one structure, using separate nomination form for each. Associated Members and non-member countries can nominate their structures through neighbouring active NCs or by submitting directly to ICID Central Office. The fifth batch of WHIS will be included in the ICID Register of WHIS available at http://www.icid.org/icid_his1.php.

The deadline for receipt of the entries for the WatSave awards and WHIS from the National Committees along with the completed ‘Nomination Form’ and related details to the ICID Central Office, New Delhi is **30 June 2019**.

More information including the detailed procedure for nomination and criterion for the awards can be accessed @ http://www.icid.org/awards_icid.html

For any queries, please contact Dr. Sahdev Singh, Director (Knowledge Management) at icid@icid.org.

Roorkee Water Conclave 2020

Climate change and its impact on water sector is the most critical global challenge in present century. It is likely to be more severe in developing countries whose economy is largely dependent on the agriculture and already under stress due to population increase and associated demands for energy, freshwater and food.

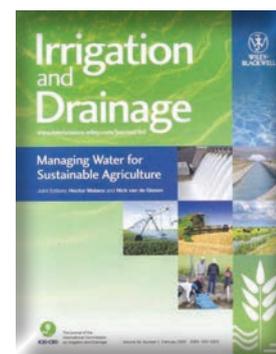
Keeping in view the importance of impacts of climate change, the Indian Institute of Technology Roorkee (IITR) in collaboration with the National Institute of Hydrology (NIH), Roorkee cordially invite all prospective delegates to participate in Roorkee Water Conclave 2020 to be held at Indian Institute of Technology Roorkee, Uttarakhand, India from 26-28 February 2020. Eminent experts from international and national universities/institutes, Research institutions, government organizations, planners and decision makers, field personnel, consultants,

multilateral and bilateral international organizations have been invited to be a part of the first international water conclave.

The Roorkee Water Conclave is being organized broadly focusing on “Hydrological Aspects of Climate Change.” The conference will aim to identify the key issues and challenges, which the expected climate change will bring in water resources planning, design and management and provide a framework for adequate research and formulate recommendations for future course of action.

Online Registration is Now Open @ <https://bit.ly/2uxz2Wm>

For more information, please visit: <https://www.iitr.ac.in/rwc2020/> or E-mail: info.rwc@iitr.ac.in.



- Early View service display papers online as soon as they are accepted for publication that are several months earlier than the papers published in print
- Sign up for FREE Wiley Alerts and receive the Table of Contents via email when published online.

For 2019 Wiley has provided each ICID Office Bearer, Working Group member and subscriber a unique membership registration number. Your e-mail address is your username and you can choose your own password.

Click for direct access to the page with published papers of the current issue of Irrigation and Drainage @ [http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1531-0361](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1531-0361).

Irrigation and Drainage Volume 68.2

The latest volume of Irrigation and Drainage journal 68.2, published in April 2019 is now available online. The new volume is FREE via Wiley online library for all ICID Office Bearers, Workbody members and subscribers.

WILEY ONLINE LIBRARY

Newly added features include:

- Papers available in easy to read PDF format
- Access to full text of all the articles as well as Tables of Contents and Abstracts published in Irrigation and Drainage since 2001

Short course on Water Security 2019

The School of International Development and Water Security Research Centre at the University of East Anglia (UEA), Norwich, UK is organizing a short course on water security from 24-28 June 2019. The summer course - bringing together key strengths in water politics, climate change, agricultural water management and water allocation - will provide participants with an exceptional chance to acquire an understanding of this key global issue and to explore different interpretations of water security in an international and developing economy context. Participants will leave the course with an ability to critically assess and address current water security issues and policies and to gain an appreciation of the relations between water security and development, health, climate, food and national security.

Using a successful format developed during 2018, the Water Security training in 2019 will be introduced to the use of water security 'games' during the

week and as informal coursework which are an excellent device to overcome echo-chambers within water security. By helping to surface different kinds of beliefs, games achieve two outcomes; first that we are open towards normative ideas (we should be water secure, we should build dams, we should revise water law, we should be more efficient) whilst, second, we are more critical with our thinking (solutions may not work, or will need tailoring, or will be counter-productive).

Target Audience

The course is designed for entry and mid-level water and development policy-makers and professionals in government, donor, NGO or implementing agencies as well as for environmental and sustainability journalists, scientists, consultants and activists.

Topics include: Water security fundamentals | Water resources security and water scarcity | Climate change

security and water security | Water sharing through the River Basin Game | Food security, agriculture and water security | Water security and health | Transboundary water security and hydro-politics | Global trade, global political economy and water | Water markets and water security.

Course Requirements

The course is conducted in English. Full competence in English, written and spoken is an essential requirement.

To Apply: <https://bit.ly/2PqLxQf>

Contact: devco.train@uea.ac.uk (mailto:devco.train@uea.ac.uk); +44 1603 592340

For more information and to download brochure, please visit: <https://www.uea.ac.uk/international-development/dev-co/professional-training/water-security>



News Buzz: ICID National Committees

KCID (Korea)

The Korean National Committee on Irrigation and Drainage (KCID) is pleased to announce Mr. Kim In Sik, CEO of Korea Rural Community Corporation (KRC) as the new Chairman of KCID w.e.f 29 March 2019. KCID, since 1969, is one of ICID's important and active National Committees and has been actively supporting ICID's vision and mission. We look forward to the continued and active support of KCID and KRC and their greater involvement in promoting the activities of ICID under Mr. Sik's able leadership and support.

Mr. Kim In Sik Chairman
Korean National Committee on Irrigation and Drainage (KCID)
CEO, Korea Rural Community Corporation (KRC)
3F, Rural Research Institute

870, Hae-an-ro, Sangok-gu
Ansan-si, Gyeonggi-do, 15634
Tel: +82-61-338-5001
Fax: +82-61-338-5009
Email: kcidkr@gmail.com

ESTICID (Estonia)

The Estonia National Committee (ESTICID) has notified change in the contact details of Mr. Hannes Puu's, Chairman, ESTICID. All National Committees are requested to correspond as per the new details below:

Mr. Hannes Puu, Chairman
ICID National Committee of Estonia (ESTICID), Chief specialist
Estonian Ministry of Rural Affairs
Tahe 4, Tartu, Tartumaa, 51010
Tel: +3725209871
Fax: +3726256241
Email: hannes.puu@agri.ee

for Improved Resilience of Agriculture in Africa.
E-mail: bartali.h@gmail.com, anafide.ma@gmail.com; Website: <http://5arcid.ma/>

24th ICID International Congress & 71st IEC Meeting, 22-28 September 2020, Sydney, Australia. For more info contact: Mr. Bryan Ward, Chief Executive Officer, Irrigation's Australia Limited (IAL) (Incorporating IACID); Email: bryan.ward@irrigation.org.au, info@irrigation.org.au; Website: <http://www.icid2020.com.au>

Other Events

ISMAR 10: International Symposium on Managed Aquifer Recharge, 20-24 May 2019, Madrid, Spain. For more details, please visit: <http://ismar10.net>; Email: info@ismar10.net

Water and Society 2019: 5th International Conference on Water and Society, 2-4 October 2019, Valencia, Spain. For more details, please visit: <https://www.wessex.ac.uk/conferences/2019/water-and-society-2019>; Email: wit@wessex.ac.uk

MinWat 2020: 3rd International Multidisciplinary Conference on Mineral Waters: Genesis, Exploitation, Protection and Valorisation, 31 March-3 April 2020, Caserta, Italy. For more details, please visit: <https://iah.org/events/minwat-2020>; Email: segratario@iahitaly.it

Water Pollution 2020: 15th International Conference on Monitoring, Modelling and Management of Water Pollution, 13-15 May 2020, Valencia, Spain. For more details, please visit: <https://www.wessex.ac.uk/conferences/2020-conferences/water-pollution-2020>; Email: wit@wessex.ac.uk



Events Corner

ICID Events

3rd World Irrigation Forum (WIF3) & 70th IEC Meeting on the theme 'Development for water, food and nutrition security in a competitive environment', 1-7 September 2019, Bali, Indonesia. For more info contact:

Ir. Adang Saf Ahmad, CES, President, INACID; Email: inacid.indonesia@gmail.com; adangsafa@yahoo.com; Website: <http://icid2019.com/>

5th African Regional Conference on Irrigation and Drainage (ARCID), 16-19 March 2020, Marrakech, Morocco on the theme: Sustainable Management of Irrigation



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International Commission on Irrigation and Drainage (ICID)

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